DOCUMENT RESUME

ED 480 588 HE 036 138

AUTHOR	Arendale, David
TITLE	Annotated Bibliography of Future Trends in Academic Access, Developmental Education and Learning Assistance. Revised.
PUB DATE	2003-08-07
NOTE	13p.; For updates to this bibliography, see the searchable database at: http://www.tc.umn.edu/~arend011/bibdir.htm.
PUB TYPE	Reference Materials - Bibliographies (131)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	*Access to Education; *Developmental Programs; Educational Policy; *Educational Trends; *Higher Education; Learning; Models; Resources; Trend Analysis

ABSTRACT

This annotated bibliography provides an overview of selected recent publications related to issues that will impact developmental education in the future. The document is divided into six sections: (1) interviews by national leaders in the field; (2) changing values in higher education; (3) culture and demographics; (4) educational theory and its implications; (5) institutional, state, and national policies; and (6) model practices in developmental education. Many of the documents are available online, as noted. Because future trends are often detected in five states (California, Colorado, Connecticut, Florida, and Texas), the reader is encouraged to pay particular attention to events in these states. (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 480 588

Annotated Bibliography of Future Trends in Academic Access, Developmental Education & Learning Assistance

David Arendale

August 7, 2003

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

D. Arendale

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

HE 036 138

BEST COPY AVAILABLE

Annotated Bibliography of Future Trends in Academic Access, Developmental Education & Learning Assistance

Revised August 7, 2003

David Arendale, University of Minnesota-Twin Cities, 2003

Introduction

The following annotated bibliography provides an overview of selected recent publications related to issues that will impact developmental education in the future. The document is divided into six sections: interviews by national leaders in the field; changing values in higher education; culture and demographics; educational theory and its implications; institutional, state, and national policies; and model practices in developmental education. Many of the documents are available through the web as noted in the references. New citations will be added periodically to a searchable on-line database that can be retrieved at http://www.tc.umn.edu/~arend011/bibdir.htm

Based on the research model developed by John Naisbitt and other futurists (co-author of *Megatrends* among other books), future trends are often first detected in the following five states: California, Colorado, Connecticut, Florida, and Texas. For a variety of geographic and demographic reasons, these "leading indicator" states often are predictive of future trends in a wide variety of areas. The reader is encouraged to be especially observant of events occurring in these states.

1. Interviews and Statements by National Leaders

The following documents are a sample of the current thoughts of regional and national education leaders and the future of education related to this topic area.

Callan, P. M. (2000, Fall). An interview: Robert McCabe. National Crosstalk, Retrieved from http://www.highereducation.org/crosstalk/ct1000/interview1000.shtml
Robert McCabe, senior fellow with the League for Innovation in the Community College and former president of Miami-Dade Community College is the focus of this interview. Much of the interview revolves around McCabe's newest book, No One to Waste, a national study of community college remedial programs. McCabe employs a variety of arguments for the support and expansion of remedial education.

Damashek, R. (1999). Reflections on the future of developmental education, Part I. Journal of Developmental Education, 23(1), 18-20, 22, 35
Interviews were conducted with a number of leaders within developmental education: David Arendale, Hunter Boylan, Kaylene Gebert, Martha Maxwell, Santiago Silva, and Diana Vukovich. Each responded to a common set of questions about the future of developmental education. The interview concludes in part II which was published in the succeeding issue of the JDE.

Damashek, R. (1999). Reflections on the future of developmental education, Part II. Journal of Developmental Education, 23(2), 18-20, 22 Retrieved from http://www.ced.appstate.edu/centers/ncde/reserve%20reading/V23-2damashek%20reflections.htm
Interviews were conducted with a number of leaders within developmental education: David Arendale, Hunter Boylan, Kaylene Gebert, Martha Maxwell, Santiago Silva, and Diana Vukovich. The dialogue points to several emerging trends: (a) mainstreaming,

HE036138

BEST COPY AVAILABLE

(b) removal of developmental education from 4-year institutions, and ©) increased professionalism of developmental educators. Mainstreaming developmental education courses into college-level, graduation-credit programs of study fits into the paradigm of learning assistance and enrichment for all students. Without question, the participants in the discussion were unanimous in proposing a comprehensive academic support program that would include elements such as a learning center, adjunct or paired courses, Supplemental Instruction, tutoring, student assessment, and program evaluation. Boylan advocates funds for professional development and Gebert proposes faculty, student, and staff recognition whereas Silva includes academic advising, counseling, career services, mentoring, and especially faculty training in his list of important program components. Arendale and Vukovich propose a complete paradigm shift away from the medical model to learning support for all students. By deferring to Maxwell's (1997) latest book Improving Student Learning, Vukovich gives Maxwell credit for providing insight into best practices based on years of experience and the best research resulting in the recommendation of a comprehensive learning assistance model. the value of such a model is that it is more easily integrated into the academic process because it is understood as service for all students. This model is not burdened by the stigma of serving only the least able students, who, for many academic, administrative, and political leaders, are seen as a drain on the institution's academic standards.

Gardner, J. N. (2000). The changing roles of developmental educators. Journal of College Reading and Learning, 31(1), 5-18
Taken from his keynote address to a national CRLA conference, the author argues that developmental educators need to build upon their successful history of service to students by reinventing themselves with new language, programs, and partnerships with a wider audience both inside and outside of higher education. The author brings another perspective to developmental education from his former position as Director of the national Center for the Study of the First Year Experience and a national board member for organizations such as the American Association of Higher Education.

Stratton, C. B. (1998). Transitions in developmental education: Interviews with Hunter Boylan and David Arendale. In J. L. Higbee, & Dwinell. Patricia L (Eds.), Developmental education: Preparing successful college students (pp. 25-36). Columbia, SC: National Resource Center for The First-Year Experience & Students in Transition.
This chapter asks two leaders in developmental education to do some future forecasting. Commenting about the role of DE in the future, Hunter Boylan and David Arendale discuss influences on the profession, requirements for success, and a view of expanded missions to promote the cognitive and affective growth of all students.

2. Changing Values and Priorities in Higher Education

Understanding the broader values and priorities in education can provide insight on trends that may have a dramatic impact upon this field within education.

Astin, A. W. (1998). Remedial education and civic responsibility. National Crosstalk, 6(2), 12-13 Retrieved from http://www.highereducation.org/crosstalk/pdf/ ctsummer98.pdf
The author, director of the Higher Education Research Institute at UCLA, argues that remedial education is the most important problem in education today and providing instruction in this area would do more to alleviate more social and economic problems than any other activity. Astin discusses the history and stigma of remedial education and how higher education has become focused on "identifying smart students" rather than "developing smartness" in all its students. Astin argues that it is for the benefit of society that remedial education, affirmative action, and other programs be highly supported and valued.

Astin, A. W. (1999, Spring). Rethinking academic "excellence". Liberal Education, 7-18
The author, director of the Higher Education Research Institute at UCLA, argues that more resources should be invested in improving the learning systems at colleges. Rather than measuring the quality of student freshmen, the focus should be on the value-added experience of the college and the degree to which it has been a "talent developer" of the students. This provides useful language in describing the current and future role of developmental education and learning assistance programs.

Barr, R. B., & Tagg, J. (1995). From teaching to learning: A new paradigm for undergraduate education. Change Magazine, 27(6), 13-25 Retrieved from http://critical.tamucc.edu/~blalock/readings/tch2learn.htm
This is one of the most often cited articles on this topic and is credited by some as helping to influence higher education significantly since it was published in a journal that is frequently read by college presidents and chief academic and student affair officers. According to the authors, a paradigm shift is occurring in American higher education. Under the traditional, dominant "Instruction Paradigm," colleges are institutions that exist to provide instruction. Subtly but profoundly, however, a "Learning Paradigm" is taking hold, whereby colleges are institutions that exist to produce learning. This shift is both needed and wanted, and it changes everything. The writers provided a detailed matrix to compare the old instruction paradigm with the new learning paradigm in the following dimensions: mission and purposes; criteria for success; teaching/learning structures; learning theory; productivity/funding, and nature of roles.

Eaton, S. B., & Folstein, K. (1998). A national certification program for the developmental educator: What do we think? Learning Assistance Review, 3(2), 41-45
The authors discuss the current debate over development of a certification program for those employed in the developmental education and learning assistance field. Considerable controversy surrounds the proposal since a sizeable portion of those currently employed in the field do not have formal credentials obtained through academic degree programs that relate to their current positions.

Lazerson, M., Wagener, U., & Shumanis, N. (1999). What makes a revolution: Teaching and learning in higher education, 1980-2000. Stanford, CA: National Center for Postsecondeary Improvement, Stanford University. Retrieved from http://www.stanford.edu/group/ncpi/documents/pdfs/5-11_revolution.pdf
The authors provide a review of the literature concerning trends and major writers on

teaching and learning during the 1980s and 1990s. Some of the cited leaders are Alexander Astin, Derek Bok, Richard Light, Ernest Boyer, K. Patricia Cross, and Lee Shulman. The authors argue that a major paradigm shift occurred from the preoccupation from teaching to a focus on student learning and mastery. A summary of this long report was published by the authors in Change Magazine, May/June 2000, Volume 32, Number 3, pp. 12-19.

3. Culture and Demographics

The dramatic and swift changes that are occurring within American society will have a profound impact upon education in general and this particular area.

Bruch, P. L., & Higbee, J. L. (2002). Reflections on multiculturalism in developmental education. Journal of College Reading and Learning, 33(1), 77-90
This article reports on an effort to better understand the impact of increasing demographic diversity and calls for accountability. The authors describe the conditions needed for constructive local discussions and reforms relating to multiculturalism. The authors report how a group of developmental education professionals in a large, interdisciplinary developmental education unit understand multiculturalism. They explore the potentials and challenges involved in initiating local conversations about multiculturalism.

Swail, W. S. (2002). Higher education and the new demographics: Questions for policy. Change Magazine, 34(4), 15-23
The author notes the changing demographics of higher education which lead to increasing diversity upon entry into the institution, but at the same time reveal that low-income, first generation, and students of color are less likely to graduate than their counterparts. The author asks many policy questions that will need to be answered as higher education is held accountable for producing an educated workforce from the rapidly growing diverse population of the country.

4. Theory and Implications

The impact of new emerging theories of learning and which students benefit from new practices in developmental education will have a natural impact upon the way that access programs are organized and the curriculum or services delivered.

Brothen, T., & Wambach, C. (2002). Developmental theory: The next steps. The Learning Assistance Review, 7(2), 37-44 Retrieved from http://www.eiu.edu/~lrnasst/nclca/nclcajoi.htm
The authors write in their conclusion, "In proposing our theory we recognized that creating demanding and responsive environments would not be a simple task. It takes a great deal of expertise and time to develop assignments at the appropriate level, provide adequate feedback, and respond to students as individuals. Nevertheless, we hoped that our efforts would be helpful to developmental educators. Creating a structure that can help organize our field in practical and effective ways is critical at this point in the history of developmental education. Because developmental education is a young

discipline, part of the process of its maturation will involve struggling with competing theories. This struggle should result in research that improves our enterprise".

Higbee, J. L. (2000). Commentary: Who is the developmental student? The Learning Assistance Review, 5(1), 41-50
The author writes in the conclusion, "Who is the developmental student? More appropriate question might be, 'Is there any student who would not benefit from courses, programs, and services designed to enhance academic achievement and promote the development of the individual to his or her full potential?'" The author argues for an expansion of the definition, mission, and service area of developmental education for a wider student body.

Pedelty, M. (2001). Stigma. In J. L. Higbee, D. B. Lundell, & I. M. Duranczyk (Eds.), 2001: A developmental odyssey . Warrensburg, MO: National Association for Developmental Education.
Thirty-eight students conducted ethnographic research among their peers at a developmental program within a large public university. The students found that many of their peers feel stigmatized. The author argues that stigmatization is an inevitable outcome of academic ranking and a result of the ideological narratives driving U.S. education. He proposes a "justice model" to deal with issues of academic stigma among students and faculty in developmental education programs.

5. Institutional, State, and National Policies

Comparing past and current policies concerning academic access, developmental education, and learning assistance programs helps to identify emerging trends that may have regional or national impact on the field.

Barefoot, B. O. (2003). Findings from the Second National Survey of First-Year Academic Practices, 2002. Brevard, NC: Policy Center for the First Year of College. Retrieved from http://www.brevard.edu/fyc/survey2002/findings.htm
These findings are based on a survey results received from 1,000 colleges concerning first-year programs for students. Several of the questions were related to developmental education. While developmental education courses are offered at nearly all two-year institutions, the percentage drops dramatically with public four-year institutions: 80%, baccalaureate general colleges; 40%, baccalaureate liberal arts colleges; 70%, master's I & II; 70%, research intensive; 60%, research extensive. In the past five years the percentage of students taking developmental courses has increased most at public two-year institutions. In general, enrollment has remained even at four-year institutions though there are differences by type. About a third of baccalaureate-general colleges reported increases while an equal percentage reported decreases at research extensive institutions.

Barton, P. E. (2002). The closing of the education frontier? Princeton, NJ: Educational Testing Service. Retrieved from http://www.ets.org/research/pic/frontier.pdf
The author makes an implicit analogy with a theory that early America was defined by the opportunity presented by Frederick Jackson Turner's thesis of the 'opening of the

American west'. The Turner thesis was, "Up to our own day American history has been in a large degree the history of the colonization of the Great West. The existence of an area of free land, its continuous recession, and the advance of American settlement westward explain American development". Accordingly, America changed when the West was closed and opportunity ended in 1893. Using this concept as a counterpoint, Barton questions whether the frontier of educational opportunity has already closed, and thereby changing American culture. He argues that there is empirical evidence that postsecondary educational opportunity has closed, and therefore changing the nature of American society. Barton's data challenges the conventional wisdom that educational attainment has continued to increase during the last quarter century. He paints a picture of an educational system that is not producing more high school graduates, that continues to display great social inequality, and that is not able to support greater proportions of students through to degree in four-year college programs.

Boylan, H. R., Saxon, D. P., & Boylan, H. M. (2002). State policies on remediation at public colleges and universities. Unpublished manuscript, National Center for Developmental Education, Appalachian State University, Boone, NC. Retrieved from http://www.ced.appstate.edu/centers/ncde/reserve%20reading/state%20Policies.htm
The authors conduced a survey of higher education officials of all 50 states. States where developmental courses are restricted at state two and four-year institutions: California, Massachusetts, Mississippi, Missouri, New York, New Mexico, Texas, Utah, Washington, and Wisconsin. States where developmental courses are restricted to only two-year institutions: Arizona, Colorado, Florida, Georgia, Montana, South Carolina, Tennessee, and Virginia. Other survey results include regulations concerning mandatory testing and placement, impact upon financial aid, type of academic credit awarded, and state efforts to reduce the need for developmental education coursework by changes with high school curriculum.

Cloud, J. (2002, October 14). Who's ready for colege? [Sic] Conservatives want to get rid of remedial education. If so, only two-thirds of today's freshmen need apply. Time Magazine,
The article repeats previously reported research such as about one-third of entering students need to enroll in one or more developmental courses. Several states are reported to ban financial support for developmental education, even at the community college level.

Cunningham, A., Redmond, C., & Merisotis, J. (2003). Investing early: Intervention programs in selected U.S. states. Montreal, Canada: The Canada Millennium Scholarship Foundation. Retrieved from http://www.millenniumscholarships.ca/en/research/investingeng_web.pdf
This study focused on 17 pre-college intervention programs offered in 12 states that are targeted for middle-school or high-school students. Effective programs had the following characteristics: they were comprehensive involving multiple areas (college awareness, financial aid counseling, academic enrichment, financial incentives); academic development (tutoring, mentoring, coursework) were important components; linkage with area postsecondary institutions. One of the biggest problems cited among the programs was that many eligible students did not participate in the programs for a

variety of personal reasons and also that the programs limited their size due to budget constants.

Furlong, T., & Fleishman, S. (2000). College preparatory program agreements between state universities and community colleges: A Level 1 review. Tallahassee, FL: Florida State Board of Community Colleges. (ERIC Document Reproduction Service No. ED440716).
This report reviews the long history of college preparatory programs offered to state university students in Florida through partnerships with local community colleges. Courses are offered either at the community college or by the community college on the university campus. Results of the study suggest that: (1) administration of the college-university agreements are sound; (2) communication between sectors is adequate; (3) there are not problems with delivery of services to students; (4) community colleges are perceived to be best suited for delivery of remedial instruction; and (5) the majority of students successfully perform college-level coursework after completing college preparatory courses.

Jehangir, R. R. (2002). Higher education for whom? The battle to include developmental education at the four-year university. In J. L. Higbee, D. B. Lundell, & I. M. Duranczyk (Eds.), Developmental education: Policy and practice (pp. 17-34). Auburn, GA: National Association for Developmental Education.
This chapter examines the debate regarding the role of developmental education at public four-year universities, and will focus on the following topics: discussion of the historic and political forces that have shaped perceptions regarding DE; a description of DE and developmental students; an examination of the debate around its place in higher education with specific attention to current state legislative action against DE at the public four-year university; and recommendations for developmental educators who seek to challenge the merit of such legislation and create a paradigm shift around perceptions of DE.

Kipp, S. M., Price, D. V., & Wohlford, J. K. (?002). Unequal opportunity: Disparities in college access among the 50 states. Indianapolis, IN: Lumina Foundation for Education. Retrieved from http://www.luminafoundation.org
This national study investigates academic access in all 50 states for students of varying levels of income and academic preparation. Two major dimensions were studied at the 2,800 postsecondary institutions in the study: admissibility and affordability. While most states provide low-income dependent students with access to public two-year institutions without borrowing, fewer states provide similar access to public four-year institutions. The major findings of the study include: the percentage of admissible institutions varies widely among states; the percentage of affordable institutions varies widely among states; low-income dependent and independent students have fewer accessible options than median-income students; and borrowing is more frequently required to achieve affordability for low-income dependent students than it is for median-income dependent students. Part of this variability in access is due to differences across and within states in students' academic preparation, selectivity of institutions, variations in tuition policies, and variations regarding state financial aid programs.

Lizotte, R. (1998). Access and quality: Improving the performance of Massachusetts Community College developmental education programs. Boston, MA: Massachusetts Community College System. Retrieved from http://cit.necc.mass.edu/mccdec/Access%20and%20Quality2.htm
The Massachusetts Community College Developmental Education Committee was charged to identify practices and models for adoption by the state's community colleges. Some of the recommendations include the following four areas. *Assessment and Placement:* mandatory comprehensive assessment of all incoming students; mandatory placement into appropriate courses. *Curriculum Design and Delivery:* comprehensive developmental curriculum; exit criteria for each developmental course; conduct continuous outcome research to measure program effectiveness. *Support Services:* monitor student success through intrusive advising; provide tutors and Supplemental Instruction program. *Organizational Structure:* professional development of faculty; fund full-time faculty to teach developmental courses.

NERCHE. (2002). Developmental education and college opportunity in New England: Lessons for a national study of state and system policy impacts. Washington, D.C.: The Institute for Higher Education Policy and New England Resource Center for Higher Education. Retrieved from http://www.nerche.org/IHEP/FinalRep/NERCHEfinal.pdf
This pilot project does not evaluate New England's state policies or compare New England public institutions, but rather provides important clues and lessons on how developmental education policies are being implemented in a specific geographic region, and what questions need to be considered in a national study or project. Common characteristics of developmental education (DE) programs were: formation of two-year/four year partnerships; outsourcing of DE to local community colleges; transfer of priority of DE to two-year colleges; centralize DE programs at four-year colleges; providing summer bridge DE programs; and using ACT Accuplacer for assessment of students. Numerous recommendations were made for a national study on developmental education: examine both centralized and decentralized state system policy approaches to DE; financial implications of statewide DE policy; curriculum impacts of DE policies; admissions decisions and enrollment yields impacted by DE programs and policies; and examine student responses and perspectives as a consequence of changing statewide policies related to DE.

O'Brien, C., & Shedd, J. (2001). Getting through college: Voices of low-income and minority students in New England. Washington, D.C.: The Institute for Higher Education Policy. Retrieved from http://www.ihep.com/Pubs/Nelliemae.pdf
This research study employed surveys and in-depth interviews with currently enrolled low-income and minority students in the New England region concerning their feelings about the obstacles they face in succeeding in college and what strategies they are employing to deal with the environment. Findings from the study include: 1. Pre-college academic preparation programs were rated highly as supporting current college success though only one-fourth of eligible students are able to participate at the high school level. 2. Financial aid was a key factor in college attendance though one-third indicated that their financial aid package was inadequate and caused other hardships in their lives. 3. Minority students were more likely to participate in pre-college programs than their counterparts. Recommendations offered by the report include: increased

awareness of pre-college academic preparation programs; increased offerings of grants in lieu of loans; increased efforts to establish a "campus community" for students who live off-campus, have families, off-campus employment, and other responsibilities away from the campus.

Shaw, K. M. (1997). Remedial education as ideological battleground: Emerging remedial education policies in the community college. Educational Evaluation and Policy Analysis, 19(3), 284-296
The author describes the current debate about the appropriate location of remedial education classes and their frequent placement with public community colleges. The ideological underpinnings for the debate are examined. Distinctions are drawn between developmental and remedial education and the appropriate implementation by community colleges. Some institutions are strongly controlled by state-level policy making that strictly dictates the implementation of policy down to the individual institution regarding testing, admissions, placement into remedial courses, and the curriculum of such courses. Other states provide guidelines that are open for interpretation by the individual institution. Still other states are not directive regarding such matters which are left for local control. This represents three distinct policy models used by public community colleges in the U.S.

Task Force on Remedial Education. (1997). Report of the task force on remedial education. Boston, MA: University of Massachusetts. Retrieved from http://cit.necc.mass.edu/mccdec/Report%20of%20the%20Task%20Force.htm
In this document, the Task Force on Remedial Education examines the issue of remedial education, describes the scope of remedial education at the University, and offers recommendations for policies and administrative procedures that will foster student learning through remedial education: 1. The University of Massachusetts should continue to offer limited remedial programs to address the needs of its admitted students. 2. The University and the Community Colleges should explore additional avenues of collaboration that might improve or enhance the quality and cost-effectiveness of remediation available to students enrolled in both sectors. 3. All entering first-time freshmen and transfer students should continue to be assessed by each campus to determine appropriate course assignments for mathematics and writing. 4. Campus faculty and administrators responsible for remedial programs at UMass campuses should increase their levels of communication and collaboration with each other. 5. The University should develop better methods for assessing the outcomes of remedial instruction, working collaboratively with other sectors of higher education as necessary.

6. Model Practices

In response to many of the trends areas identified earlier in this paper, a number of model practices have been developed to meet the needs of students admitted through

academic access programs and the newly recognized needs of the general student population.

Boylan, H. R. (1999). Exploring alternatives to remediation. Journal of Developmental Education, 22 (3), 2-4, 6, 8, 10 Retrieved from http://www.ced.appstate.edu/centers/ncde/reserve%20reading/V22-3alternatives%20to%20remediation.htm
The article addresses issues related to the cost and time investment of providing remedial courses to college students and offers an overview of possible alternatives. Some criticisms of developmental education are examined and countered with evidence from research. Frequently employed current practices are outlined. More recent alternative approaches to course delivery and student support services are then reviewed, and their application to at-risk student needs is discussed. Recommendations for the actual implementation of alternatives are included. In addition to traditional approaches, developmental educators and developmental programs currently provide a variety of more innovative alternatives. Examples of these alternatives include freshmen seminar/orientation courses (Upcraft, Gardner, & Associates, 1989), Supplemental Instruction (Martin & Arendale, 1994), paired or adjunct courses (Commander, Stratton, Callahan, & Smith, 1996), collaborative learning communities (Tinto, 1997), and critical thinking courses and programs (Chaffee, 1992).

Boylan, H. R. (2002). What works: Research-based best practices in developmental education. Boone, NC: Continuous Quality Improvement Network with the National Center for Developmental Education. A summary of this document can be retrieved from http://www.ced.appstate.edu/centers/ncde/reserve%20reading/what%30works.htm
This document reviews successful, research-based practices in developmental education. The following instructional practices were identified as best practices: learning communities; accommodation of diversity through varied instructional methods; use of Supplemental Instruction; provide frequent testing opportunities; use of technology in moderation; provide frequent and timely feedback; use of mastery learning; link developmental course content to college level requirements; share instructional strategies; teach critical thinking; teach learning strategies; use active learning techniques; and use classroom assessment techniques.

Koski, W. S., & Levin, H. M. (1998). Replacing remediation with acceleration in higher education: Preliminary report on literature review and initial interviews. Stanford, CA : National Center for Postsecondary Improvement. Retrieved from http://www.stanford.edu/group/ncpi/documents/pdfs/4-01_remediation.pdf
The authors offer recommendations for alternative delivery systems for remedial and developmental education. Part of the recommendations are based on the successful model of the Accelerated Schools Movement that makes systematic changes within a school district resulting in improved the academic achievement of at-risk elementary and secondary students. Some of the recommended models are: linked/paired courses; Supplemental Instruction; learning communities; critical thinking programs; and student-centered instruction/individualized learning. A number of institutional success stories are cited included General College of UM. Another summary of the report can be retrieved from http://www.finarticles.com/cf_0/m1254/1_31/54051232/print.jhtml.

Martin, D. C., & Blanc, R. (2001). Video-based Supplemental Instruction. Journal of Developmental Education, 24(3), 12-14, 16, 18, 45 Retrieved from http://www.umkc.edu/cad/si/sidocs/jbvsi94.htm
Developed at the University of Missouri-Kansas City, Video-based Supplemental Instruction is an interactive information processing and delivery system that helps academically at-risk students master rigorous course content as they concurrently develop and refine reasoning and learning skills. Rather than requiring prerequisite enrollment in a traditional developmental course, VSI is a learning system that mainstreams the best practices of developmental education into historically-difficult core curriculum courses such as Western Civilization I, College Algebra, or General Chemistry.

Stansbury, S. (2001). Accelerated Learning Groups enhance Supplemental Instruction for at-risk students. Journal of Developmental Education, 24(3), 20-22, 24, 26, 28, 40
In order to increase Supplemental Instruction (SI) attendance, Accelerated Learning Groups (ALGs) were developed. A pilot study investigat20-22, 24, 26, 28, 40ed whether at-risk students who participated in an ALG/SI combination demonstrated higher self-efficacy and SI attendance than those who participated in only SI. Results suggested that at-risk students were more likely to participated in 12 or more SI sessions if they attended an ALG/SI combination than if they attended only SI. In addition, the range of final grades was higher for those who attended an ALG/SI combination than for those who attended only SI. The development of prerequisite skills was essential for the efficacy of SI to serve academically underprepared students who may shun the very academic intervention that would be of most help to them. Additional research is warranted to investigate this area.

Tinto, V. (1998). Leaning communities and the reconstruction of remedial education in higher education. Journal of Higher Education, 68(6), 599-623. A version of the document can be retrieved from http://soeweb.syr.edu/faculty/vtinto/files/%20Learning%20Better%20Together.pdf.
The author suggests that variations of learning communities are more effective than stand-alone remedial courses for underprrepared students. A number of institutions have successful concurrently enrolled developmental students in reading courses that are linked to an academic content course which result in higher student outcomes than students enrolled in classes where the curriculum is not coordinated.

Wilcox, K. S., DelMas, R. C., Steward, B., Johnson, A. B., & Ghere, D. (1997). The "package course" experience and developmental education. Journal of Developmental Education, 20(3), 18-20, 22, 24, 26
The effect of package courses-based on the learning community model-on several educational outcomes was investigated for linked courses: a content course; an academic success/study skills course; and, in some cases, a noncredit math course. Package course students earned higher student outcomes and additional qualitative benefits were observed at the General College of the University of Minnesota.

TM030 26

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC Educational Resources Information Center

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Annotated Bibliography of Future Trends in Academic Access, Developmental Education and Learning Assistance

Author(s): David R. Arendale

Corporate Source: University of Minnesota

Publication Date: August 7, 2003

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☒

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature: David R. Arendale	Printed Name/Position/Title: Assistant Professor DAVID R. ARENDALE
Organization/Address: 262 Appleby Hall, General College 128 Pleasant Street S.E. University of Minnesota Minneapolis, MN 55455	Telephone: 612-625-2928 FAX: 612-379-1031 E-Mail Address: DAVID@ARENDALE.ORG Date: 8/20/03

(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: ericfac@inet.ed.gov
WWW: http://ericfacility.org